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THE RACES OF THE CITRINE CANARY FLYCATCHER, CULICICAPA HELIANTHEA

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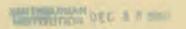
The flycatcher genus *Culicicapa* consists of two closely related species, *ceylonensis* and *helianthea*, of somewhat uncertain affinities within the family Muscicapidae (Vaurie, 1953: 532). The gray-headed species *ceylonensis* has a fairly wide distribution in southeast Asia, while *helianthea* is confined to the Philippines and Celebes. The two species are sympatric on the island of Paláwan.

The Citrine Canary Flycatcher, *C. helianthea*, is a small bird (wing 53–62 mm), yellow below and greenish above, with a yellow rump-patch and narrow yellow eye-ring. Although it has been collected on at least nine islands of the Philippines, its distribution within that archipelago is spotty, and it is apparently rather uncommon on most of the islands from which it has been recorded. Three subspecies are currently recognized: *C. h. helianthea* (Wallace) from Celebes; *C. h. panayensis* (Sharpe) from the Philippines in general; and *C. h. mayri* Deignan from Tawitawi and Bongao in the Sulu chain. The material I have assembled indicates the presence in this species of geographic variation not adequately expressed by the present division into three subspecies.

Color has been the principal criterion employed in the present study. There is definite variation in size, but there is also sexual dimorphism, males averaging larger than females. The sex ratios within the small available samples of this uncommon species are unbalanced to the extent that comparisons are difficult. Of six specimens from Tawitawi, for example, all are sexed as females, while only one of thirteen from north-

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ern Luzón is so sexed. It is therefore possible only to mention apparent trends in size when characterizing the subspecies.

Specimens for this study were borrowed from the American Museum of Natural History, United States National Museum, Academy of Natural Sciences of Philadelphia, and Chicago Natural History Museum. I am indebted to the respective authorities of those institutions; and to Robert W. Storer, who compared selected specimens with the type of *panayensis*, now at the Museum of Zoology, University of Michigan. After this paper had been essentially completed, additional specimens were examined at the Peabody Museum of Natural History, Yale University. With the exception of a single specimen from Mt. Santo Tomás, Luzón, the Yale specimens were neither measured nor listed among the "Specimens Examined" beyond.

A. L. Rand, who had studied this species several years ago, kindly gave me the benefit of a summary of his conclusions, which proved to be almost exactly those I had reached independently.

Culicicapa helianthea helianthea (Wallace)

Muscicapa helianthea Wallace, 1865. Proc. Zool. Soc. London, p. 476 (Menado, Celebes).

Characters: See comparison with other races, beyond.

Range: Celebes.

Specimens examined: Celebes (various localities), 5. A larger series was used for initial comparisons in New York, but these five were taken to Carnegie Museum for detailed comparisons.

Measurements: 3 wing (flat) 61, 63; tail 51, 51. 9 wing 58.5, 59, 60; tail 48, 48, 50.

Culicicapa helianthea panayensis (Sharpe)

Xantholestes panayensis Sharpe, 1877. Trans. Linn. Soc. London, 2nd ser., Zoology, 1: 327 (Panay).

Characters: Although this is the subspecies of longest standing, it is the least well differentiated. I have seen no Panay specimens. These comparisons are based on specimens from Negros, Mindanao, and Paláwan, among which there are no appreciable differences in color (Paláwan specimens average slightly larger than the others). Storer's remarks on the type specimen are quoted beyond. This race is close to helianthea, but averages slightly richer yellow below, especially on the throat; the yellow rump-patch averages slightly more extensive; the eye-ring is somewhat duller, contrasting less with the sides of the head, which are less intensively yellow than in helianthea; averages slightly smaller in size.

The supposed difference between *helianthea* and *panayensis* in bill and foot color mentioned by Peters (1939: 114) is invalid; collectors' notes on labels indicate that both in Celebes and in the Philippines, bills may be either black or sepia, and feet from yellow to dark brown. Material at hand is insufficient to determine whether this variation in soft-part colors may be related to age, sex or season.

A single male from Leyte in the American Museum of Natural History is somewhat less golden yellow, especially on the rump, than any of the series of panayensis, and is also slightly smaller than any of the males of that race examined (wing 56, tail 44). More strikingly different from the rest of the series is a single unsexed specimen, now in Carnegie Museum, collected by Bourns and Worcester at Toledo, Cebú, 13 June 1892. It has the rump-patch virtually obsolete (this may in part be an artifact, as some of the feathers of this area may be missing); it is darker, less yellow dorsally, and paler below, especially on the throat and face. It is within the size range of panayensis (wing 59.5, tail 49). I have seen no other Cebú specimens, and McGregor (1909: 472) lists only Bourns and Worcester as having collected the species on that island. It is possible that this specimen represents an extinct Cebú endemic subspecies, as Rabor (1959: 40) looked for the species on Cebú in vain.

Storer (letter of 15 April 1960) describes the type of panayensis as "a pretty miserable specimen, lacking the tail and most of one wing (other wing 57 mm) and with the feathers of the face matted and useless for comparison . . . [It] is intermediate in back color between the Cebu and Negros birds but nearer the Negros bird. Its throat is more like that of the Cebu bird. My opinion, for what it is worth, is that the difference in the throat could be one of age." In view of the sparsity of material, and of the poor condition of the single Panay and Cebú specimens, it would appear that the best treatment at present would be to use the name panayensis for the populations of all of the islands listed below.

Range: Panay, Negros, Mindanao, Paláwan, ?Leyte, ?Cebú. Bourns and Worcester (1894: 41) also list panayensis from Tablas, Romblón, Sibuyán, Guimarás, Masbate, and Siquijor, but I have been unable to determine the basis for these supposed records. These islands are not listed by McGregor (loc. cit.).

Specimens examined: NEGROS: Lake Balinsasáyao, 4; Cuernos de Negros, 4; Canlaón Volcano, 1; Bais, 1. MINDANAO: Lake Lanao, 4; Ayala, 2; Sumilao, 2; Mt. Apo, 1; Pantar, 1. PALÁWAN: Puerto Princesa, 5; Taguso, 1; Aborlán, 1; unspecified, 1. CEBÚ: Toledo, 1. LEYTE: "Mts. of north Leyte," 1.

Measurements: (Cebú and Leyte specimens omitted; Paláwan measurements italicized): \$\delta\$ wing 57, 57, 58, 58.5, 59, 59.5, 60, 60, 60.5, 61.5; tail 45, 47, 47, 47.47, 47.5, 47.5, 48.5, 49, 49.5, 50, 51, 51.5. \$\mathcal{Q}\$ wing 53, 55, 55, 55.5, 56, 56.5, 57.5, 57.5, 58, 58, 58.5, 59, 59; tail 45, 45.5, 46, 46, 47, 47, 47.5, 48, 48, 48.5, 48.5, 50, 50. Type of panagensis (measured by R. W. Storer), \$\delta\$ wing 57.

Culicicapa helianthea mayri Deignan

Culicicapa helianthea mayri Deignan, 1947. Proc. Biol. Soc. Washington, 60: 61 (Tataán, Tawitawi Island, Sulu Archipelago).

Characters: Less richly yellow than panayensis on rump and underparts; paler and grayer on throat; green of crown and back less suffused with golden yellow; cheeks relatively paler, contrasting more with crown; averages smaller than panayensis, especially in tail length. This description is based on topotypes from Tawitawi; the two Bongao specimens seen are somewhat larger and generally darker in color. I tentatively follow Deignan in assigning them to mayri, but additional material from Bongao might well support separation of an additional subspecies from that tiny island, unlikely as this may seem. There is precedent in the species Parus elegans, in which the subspecies bongaoensis is remarkably different from the subspecies suluensis found on Tawitawi (Parkes, 1958: 105).

Range: Known only from Tawitawi Island in the Sulus; birds from adjacent Bongao Island tentatively placed here.

Specimens examined: TAWITAWI: Tataán, 6. BONGAO, 2.

Measurements: Tawitawi $\, \circ \,$ wing 54.5, 55, 55, 56, 56, 57; tail 42, 44, 44, 44.5, 45, 46 [no males seen]. Bongao $\, \circ \, \,$ wing 58, tail 48; $\, \circ \, \,$ wing 59.5, tail 47.

Culicicapa helianthea septentrionalis, new subspecies

Type: U.S.N.M. no. 200638, adult &, Mount Santo Tomás (7000 feet), Benguet, Mountain Province, Luzón, Philippine Islands; collected 10 December 1905, by E. A. Mearns (original no. 13810).

Characters: Much less brightly golden yellow below than either helianthea or panayensis; ventral color deeper than mayri; anterior underparts with dusky appearance due at least in part to more extensive and darker gray bases of yellow feathers; lores dark, the color of the crown, rather than yellow as in the southern races; back and crown with less golden yellow wash than panayensis, much darker than mayri, with a more sharply defined rump-patch; size as in panayensis.

Range: Known from two areas in the highlands of the western half of northern Luzón, Philippine Islands.

Specimens examined (all localities on Luzón): Mountain Province (Benguet subprovince): Mt. Santo Tomás, 3; Irisán, 3; Baguío, 1; Haight's-in-the-Oaks, 1; 3 miles above Twin Peaks, 1; "Benguet, 6000 feet," 2. Ilocos Norte Province: Mt. Simminublán (Mt. Sicapo-o), 2.

Measurements: 3 wing 55, 55.5, 57, 58, 58, 58, 58.5, 59, 60; tail 47, 47, 47, 5, 48, 48, 48.5, 48.5, 49, 49. Q wing 57, tail 48.

Culicicapa helianthea zimmeri, new subspecies

Type: A.M.N.H. no. 296129, adult &, Mount San Cristóbal, Laguna Province, Luzón, Philippine Islands; collected 21 November 1915, by J. T. Zimmer (original no. 1306).

Characters: Similar in dark dorsal color to septentrionalis, but rumppatch slightly more golden, less greenish yellow; edges of rectrices deeper, richer yellow than in any other race, having almost an orange cast; the darkest race ventrally, the underparts being a rich, deep yellow, shaded with citrine anteriorly; axillars bright yellow, contrasting sharply with dark sides of breast; smallest of the races in average size.

Range: Known only from the mountains of southeastern Laguna Province, on the Laguna-Tayabas provincial border, south-central Luzón, Philippine Islands.

Specimens examined (all localities on Luzón): Laguna Province: Mt. Banahao, 3; Mt. San Cristóbal, 1. The latter specimen was inadvertently listed by Zimmer (1918: 226) as being from Mt. Banahao, an error of little moment as these two mountains are immediately adjacent to one another.

Measurements: 3 wing 55, 55, 56; tail 45, 46, 48. 9 wing 54.5, tail 46.

Remarks: The fame of the late John T. Zimmer as an authority on South American birds has tended to eclipse his contributions to our knowledge of Philippine birds, which remain unknown to many. His collection of meticulously labelled Philippine specimens, now at the American Museum of Natural History, has been of immense help to me in my studies. It is a pleasure for me to name this distinctive subspecies, which he alone appears to have collected, in his memory.

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